

ABSTRACT OF THE DISCLOSURE

Methods and apparatuses for performing simultaneous table look-up using multiple look-up tables. In one aspect of the invention, an execution unit in a microprocessor includes: look-up memory and a first circuit coupled to the look-up memory.

In response to the microprocessor receiving a first instruction, the first circuit partitions the look-up memory into a first plurality of look-up tables. In response to the microprocessor receiving a second instruction, the first circuit partitions the look-up memory into a second plurality of look-up tables; and the second plurality of look-up tables simultaneously look up a plurality of entries.